

"Dedicated to Public Service"

# THE RADIATOR



W6RHC  
IRL #8170  
Echolink #322788



<http://www.gearsw6rhc.org>

P.O.Box 508 Chico, CA 95927-0508

Founded: August 13 1939

September, 2014

## Coming Events

### O.A.R.S. GENERAL MEETING

Second Friday, every month, at 7:00 p.m., at St. Paul's Church Parrish Hall, 1430 Pine St., Oroville

G.A.R.S. First Wednesday, each month, General Meeting, Lutheran Church Hall, Artois; 7:00

G.E.A.R.S General Meeting, third Friday each month, at Butte County Search and Rescue Building, Chico. Doors open at 6:30 p.m.

Butte A.R.E.S. MEET: fourth Friday, monthly, at Butte County Search and Rescue Building.

### FCC EXAMS - GEARS VEC

First Sunday of every even numbered month.

At the Butte County Search and Rescue Building. Written test at 2:00 p.m. For information or pre-registration call Gene WA6ZRT, (530) 345-3515.

### Club Events:

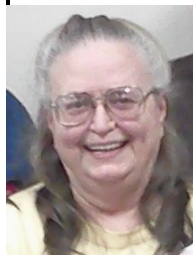
News and items of interest  
GEARS Calendar...all inside.

Website: [www.gearsw6rhc.org](http://www.gearsw6rhc.org)



Picture courtesy EVARC

## The Prez' Says:



Well; now it's September. Labor Day has passed, school has been back in session for over two weeks and it's time to check out our antennas for foul weather readiness. Co-ax connections should be inspected for cracks or leaks since a little rain in a junction can make a nasty short. Our hot summer weather can play havoc with the sealants used to protect those connectors. It's also a good time to check guy rope conditions and their anchors. The first good windstorm can put your antenna on the ground.

Our club dinner at the HomeTown Buffet was a wonderful success. Not as many showed up as I had hoped, but the food was good, the camaraderie was great and we even had "official" visitors. Ron (W6KJ) and

Joanne (N6XYL) Murdock came as representatives for the ARRL section. Joanne took pictures of the officers and Ron and of a nicely framed (courtesy of John Post) copy of the club charter.

The club gave Ron a 75 year celebration tee shirt. Joanne would have taken a tee shirt too but Dorothy had thoughtfully donated a lovely ladies' gift that went home with Joanne. Between donated prizes and gift cards, we had almost enough to go around to the attendees. That's a lots of prizes since more than 35 sat down to dinner.

You might start thinking of officer candidates for next year. I will be asking for volunteers for the nominating committee at our September meeting. Hopefully a slate of candidates will be available in October; to be added to at the November meeting and then the election will be held in December. Just think, we're already closing out this epic year.

There's not much else on my mind right now. This coming weekend is my "Class of '64" fifty year reunion. I'll get to see lots of old friends and see what fifty years of change has done. Will also shed a tear or two for those we have lost over the same period of time.

73's

Anna KG6ZOA



**Section Manager Ron Murdock-W6KJ presenting copy of GEARS Charter, dated March 1, 1940.**

**ARRL provided a copy of the original Charter as part of the Club commemoration of 75 years existence.**

**Officers in photo from left to right:**

**Secretary Dale Anderson-KK6EVS; Section Mgr. Ron Murdock-W6KJ; President Anna Horn-KG6KOA:**

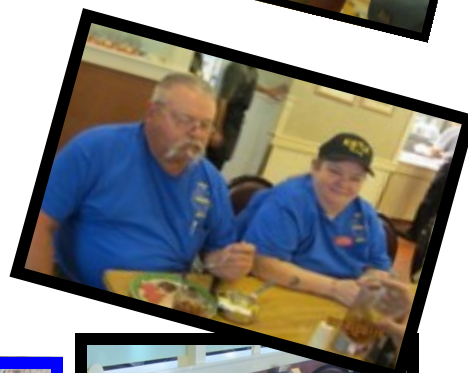
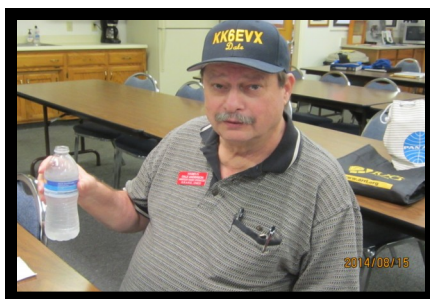
**Treasurer Lester Mikeworth-KG6KUA; Vice President Scott Petersen-KE6VUS;**

**Board Members: Stephen Wolske-KF6HSS; Stephen McDermott-W6AKF; Tom Rider-W6JS.**

**Photo by & courtesy of JoAnne Murdock-N6NYL**

**GEARS 75TH Anniversary dinner proved quite a success. Good food, conversation, laughter, all in all  
A pleasant Social evening.**





## A PAGE FROM THE PAST

For GEARS 50th anniversary on August 13, 1989, GEARS sponsored a highly successful HAMFEST. Planning for the event commenced in January 1989, with Stephen McDermott-W6AKF accepting chairman-



ship of the project, from then GEARS president, Dick Westenholm-W6BIN.

The event was an enormous success. In appreciation of his efforts as chair of the event, the club presented W6AKF with a plaque, which Stephen states he still proudly displays in his "shack".

Dick commented he does not remember the presentation of the plaque, but does recall the Hamfest with much pleasure. Stephen remarked he will never forget the effort, energy and commitment his team put into making the Hamfest a premier event! In the club records is a letter Stephen wrote detailing the preparatory labor in which the committee engaged (almost step by step) to achieve a great Hamfest!



The plaque of appreciation given To W6AKF in 1989.

(The photo of Dick and Steve, and of the plaque above is (nostalgia! We have no photo of the actual presentation!)



Caps embroidered with your name and your call sign may be ordered by contacting WA6ZRT -Gene Telephone #530 -345-3515

**VEC TESTING**  
2:00 p.m.  
October 5, 2014  
December 7, 2014

**AT BUTTE COUNTY  
SEARCH & RESCUE  
BUILDING**

**All Classes  
Technician, General and  
Extra.**

**Contact: W6JS  
Tom Rider  
530-893-9211**



### **Board of Directors Meeting: Aug 15, 2014**

**ATTENDANCE:** All present

**OLD BUSINESS:** none

**NEW BUSINESS:**

Liability Insurance next month.

The discussion on Door prizes for the dinner resulted in that there had been several donations from people and groups that we would not have to buy anything.

Discussions on getting new people involved in amateur radio.

Ham test on line was brought up. The test costs is \$15 but it is only for Technician class license.

Project's for the club to build from a balloon to a buddy pole to a J-pole.

Update on the new web page is going well.

VHF repeater noise is still accruing, looking into swapping in the backup repeater into operation.

**MEMBERSHIP APPLICATIONS:**

Two new members Michael Favor and Dustin Myers.

**ADJOURNMENT:** 21:46 hr.

Dale Anderson,  
Secretary

### **MINUTES OF GENERAL MEETING for Aug 15 2014**

**PROGRAM:** Dxpedition

**ATTENDANCE:** All present

**VEC:** None

**TRESURER:**

Balance \$2,833.86, Deposits \$225 Outflow \$198.41

**Announcement:** Stephen McDermott has obtained a Club QSL card from 1946 post marked 18 NOV 1946.

**MINUTES:** Approved the minutes from July meeting.

**OLD BUSINESS:**

**Tee Shirts:** Delivered but it was incomplete. Anna is going to get that straightened out.

**Anniversary Dinner:** Tomorrow night, there are still some openings.

**Ecolink & IRLP:** Scott has received the equipment and is assembling it now. He is asking if there is anyone has spare 50ft of cable or 2m yagi.

**NEW BUSINESS:**

**Steak Bake:** September 20 2:00pm Hammond Park in Oroville. Potluck.

**Programs:** Have some one explain the workings of the ecolink and IRLP. Possible construction of a balloon project.

**ADJOURNMENT:** 20:45 hr.

Dale Anderson,  
Secretary

## **GLENN AMATEUR RADIO SOCIETY INSTALLS 2014-2015 OFFICERS**



**Former President Tracy Pitts-KI6UQD, drove in from Clear Lake to perform the installation ceremony for GARS officers; here she swears in President Albert Leyva, N6YCK.**



**Treasurer: Phil Zaball, KI6SMN; Board Member: Joel Wilson, KJ6DIF; President: Albert Leyva, N6YCK; Vice President: Casey Lawler, W6WCL; Board Member: Janey Keim, N6NEB; Secretary: Michael Ellithorp, KF6OBI; Tracy Pitts, KI6UQD; Not shown: Publications: Howard Cawthra, KA6IOB; Training Officer: Lester Mikeworth, KG6KUO; Albert Leyva also serves as Radio Officer.**

### A BRIEF BACKGROUND ON IRLP

The Internet Radio Linking Project was started back in November of 1997 as an attempt to use the internet to link radio systems across Canada. The first full time link that was established ran from Vancouver, BC to Saint John, NB. The link had many problems and was shut down in March of 1998 due to the numerous computer crashes and repeater lockups it was causing, and the lack of user control over the system. (from [www.IRLP.net](http://www.IRLP.net))

The following are extracts from a 2001 article –(truncated )

#### *An Introduction to Internet Repeater Linking: by Peter Parker, VK3YE , 2001*

Worldwide communication from your VHF/UHF handheld transceiver. That's the promise of the Internet Radio Linking Project, amateur radio's fastest growing mode.

Participation in IRLP requires nothing more than a standard two meter or seventy centimeter handheld or mobile transceiver. Amateurs of all license levels can access IRLP if there is a node in their area.

**History:** A key aim for many amateurs has been to communicate over long distances. For most of amateur radio's history, most long distance communication has been on the high-frequency part of the spectrum. This began to change with the advent of amateur satellites. However short pass times, restricted footprints and the need for specialized equipment and antennas ensured that HF, with its modest equipment and antenna demands, remain dominant for long distance amateur communication.

The growth of packet radio from the late 1980's and the rapid spread of the internet several years later led to amateurs linking the two networks together.

The use of packet "converse bridges" linked to "wormholes" allowed amateurs to have keyboard to keyboard chats via their local bulletin board system. However network congestion and low data transfer speeds often made this mode no faster than slow-speed Morse.

Amateurs soon started to experiment with using the internet for voice communication. A system called I-Phone (internet-phone) allowed voice repeaters to be linked via the internet. I Phone proved an instant hit and soon spread worldwide. ....

I phone had several disadvantages, summarized as instability and lack of security. Instability being due to it being based on the Windows operating system. Links were frequently lost and control operators had to "babysit" the link to ensure that it remained operational. Security of the I-Phone was also poor, with it being possible for non-amateurs to break into an amateur link via the internet. Control operators had the burden of supervising their system to ensure that non-licensed persons were not illegally accessing amateur repeaters.

David Cameron, VE7LTD (a Canadian) developed an internet Based radio linking system based on software on the Linux operating system. Instability was cured, security was strengthened , using the PGZP key encryption system thus preventing pirate hackers breaking into radio links via the internet. Additional features were numerous.

#### *How IRLP WORKS...by David Cameron VE7LTD)*

An IRLP node consists of a radio transceiver—to provide an RF link into the node—an IRLP interface board and a personal computer connected to the internet. The computer uses voice over IP streaming software, which digitizes and compresses audio received from the radio. At the other end of the link it decompresses the audio and converts it to analogue. It is then fed to the radio transceiver. The process reverses when the station at the distant node responds.

To learn more, and possibly all you ever wanted to know about IRLP, go to [www.irlp.net](http://www.irlp.net). Time spent on that website will provide all the information you ever desired regarding IRLP, plus access to many IRLP enthusiasts who will be more than willing to help a beginner advance in knowledge and usage of IRLP.



## **ARRL SACRAMENTO VALLEY SECTION NEWS—July 2014 (Excerpts)**

Dr. Carol Milazzo, KP4MD, has been appointed Assistant Section Manager of our ARRL Sacramento Valley Section. Congratulations, Carol.

Many hams across the country live in new development which are governed by CC&Rs. CC&Rs are Codes, Covenants, and Restrictions and they are killers for ham radio.

Most CC&Rs prohibit the installation of ham antennas and as you all are aware, you can't operate HF without a good antenna. The FCC determined that states, counties, and cities can't prohibit the erection of antennas but did not carry their edict to cover CC&Rs, leaving that change for guidance from the U.S. Congress.

There is currently a bill in the House of Representatives to allow a reasonable accommodation for a ham antenna for someone who is governed by CC&Rs. We all know someone who is affected by the restrictions but now we can do something to help. There is a petition at [change.org](http://www.change.org) that requests that the House pass the bill and we need every ham in the country to sign it.

Please forward this link to all your ham friends (or anyone else you think might sign it). Since the petition started a few weeks ago and over 5,000 (up 1,000 from last week) and counting hams have signed it to support their fellow hams. You don't need to be a ham to sign so please enlist the help of all your friends. You can sign the petition at:

<http://www.change.org/petitions/us-house-of-representatives-cosponsor-hr-4969-the-amateur-radio-parity-act-of-2014>

## ***PACIFICON***

Pacificon 2014, celebrating 100 years of the ARRL, returns to the Santa Clara Marriott Hotel at 2700 Mission-College Blvd in Santa Clara, California.

The convention takes place Friday, October 10th through Sunday, October 12th, 2014. The talk-in frequency is 147.060+ (PL 100.0). Pacificon 2014 is the ARRL Pacific Division Convention, produced by the Mt. Diablo Amateur Radio Club (MDARC).

Pacificon gives you three great days of activities for one low cost: A full slate of outstanding Forum presentations about a wide range of amateur radio topics, a large Vendor Expo filled with exciting products and exhibits, an outdoor Swap Meet, great QRP activities, great Youth Activities including electronics kit building and soldering classes, a One Day Class to prepare you to pass the amateur Technician license examination and get your first amateur radio license, a chance to hear about and discuss important national amateur radio issues with top ARRL leaders, a chance to win great radios and other prizes throughout the convention, and perhaps the best part - a chance to interact and share information with lots of other amateur radio enthusiasts to further (or begin) your own knowledge and to advance the hobby.<sup>1</sup>

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<sup>1</sup> <http://www.pacificon.org>

## Butte County California ARES

The Amateur Radio Emergency Service (ARES) consists of licensed amateurs who have voluntarily registered their qualifications and equipment for communications duty in the public service when disaster strikes. Every licensed amateur, regardless of membership in ARRL or any other local or national organization is eligible for membership in the ARES.

The only qualification, other than possession of an Amateur Radio license, is a sincere desire to serve. Because ARES is an amateur service, only amateurs are eligible for membership. The possession of emergency-powered equipment is desirable, but is not a requirement for membership.

The Butte County ARES Emergency Coordinator is Scott Petersen, [KE6VUS](http://www.ke6vus.com).

If you are interested in joining Butte County ARES call Scott at (530) 566-3719 or go to <http://www.buttecountyares.org> to use the "[Join ARES](#)" link on the left to complete an online form for submission.

### BC ARES Frequencies

1. W6RHC, 146.850-, PL110.9
2. N6YCK, 147.105+, PL100.9
3. W6SCR, 145.290-, PL110.9 (only if not in use by Sheriff Comm Reserve)

## CA QSO

**2014 is the 48th running of the California QSO Party - 'CQP' - perhaps the largest US State QSO Party!**

**The objective of the CQP is to work as many stations in California as you can on both CW and Phone.**

**Stations may be worked once per mode/band combination for points With California Counties (58 of them) as individual multipliers.**

**California stations get credit for working stations inside and outside of the state with US States and Canadian-provinces as their multipliers.**

**The contest runs from 1600 UTC October 4th, 2014 to 2200Z on October 5th, 2014.**

**For more information go to:**  
**[www.cqp.com](http://www.cqp.com).**

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**2014 STEAK BAKE WILL BE HOSTED  
BY THE OROVILLE AMATEUR RADIO  
SOCIETY (OARS) ON SATURDAY  
SEPTEMBER 20, 2014,  
LOCATION: HAMMOND PARK  
OROVILLE**

**CONTACT  
GARY CLARK-KFCEWO  
530-534-3475**

**MAKE YOUR RESERVATION NOW!  
SEE PAGE 12 FOR DETAILS**

## TUBE(S) OF THE MONTH



Submitted by: Anna Horn -KG6ZOA

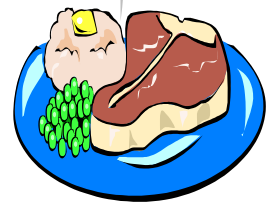




# Annual STEAK BAKE

**2 to 6 PM**  
**SEPT 20<sup>th</sup>**  
 Saturday

Come and join the members and friends of the Oroville Amateur Radio Society (OARS) celebrate summer in Hammon Park. The BBQ is sponsored by the OARS club and invites you to come and have fun. Attendees are encouraged to bring a side dish to share with others.



**Steak: \$8**  
**Burger: \$6**  
**Drinks: Free!**

**Having steak? Bring your own fork & knife...**

**Soft drinks & water  
are provided**



**2 PM to 6 PM**

Hammon Park is located behind Home Depot in Oroville... take Nelson Avenue or Grand Avenue to 2<sup>nd</sup> Street then, turn on Hammon Park Drive. Plenty of parking around the picnic area.

For more information and to register your meat selection and quantity, call Gary Clark at **530-534-7435** or on the internet at **kf6ewo@arrl.net**

**Plastic forks & knives and paper plates are provided... remember to bring a side dish to share.**

**Frisbee**

**FOX HUNT ???**

**Kids Playground**

**Have a Project? Bring it to share!**

### SUNSPOTS AND SOLAR FLARES IN THE NEWS

**WASHINGTON – NASA is warning a new sunspot spewing powerful X-class flares is beginning to rotate to a position directly in line with Earth.**

**A direct hit on Earth from an X-class flare could cause major disruptions – NASA said the warning regarding the sunspot, AR 2151, could last for weeks.....**

**Eruptions that drew the attention of space experts began .... with an M5.6 solar eruption, which is one tenth the strength of an X-class flare. X-class flares are the most power solar flare. The least intense flare is a C-class. M-class flares ranked as mid-range.**

**“Solar flares are powerful bursts of radiation,” explained NASA spokeswoman Karen Fox. “Harmful radiation from a flare cannot pass through Earth’s atmosphere to physically affect humans on the ground. However, when intense enough, they can disturb the atmosphere in the layer where GPS and communications signals travel.”**

**Some of the flares spewing from the sun’s surface can be at least 14 times the size of Earth.**

**The flares from AR 2151 were first detected Sunday by NASA’s powerful Solar Dynamics Observatory and Solar Helospheric Observatory, or SOHO, a joint NASA and European Space Agency activity. The sun is going through an 11-year cycle, which at its peak is called a solar storm maximum. The current cycle is known as Solar Cycle 24.**

**Even as the intensity of flares from the sun begins to diminish, they could hit Earth well into subsequent years, until the cycle reaches a so-called solar-storm minimum. Then, a new cycle will begin some five-and-a-half years out.**

**Note: The foregoing article is greatly abbreviated version of the original report, the complete source for which is:**

Read more at :

<http://www.wnd.com/2014/08/nasa-dangerous-sunspot-aligning-with-earth/#6SKUhv7XD5U96QQw.99>

**The GEARS Newsletter Staff:****Editor and Publisher**.....Dorothy Post**Printing & Distribution** snail mail: Evelyn Weir**Website**...Stephen McDermott W6AKF

The Radiator is a monthly publication of the Golden Empire Amateur Radio Society (GEARS). It is the policy of the Editor to publish all material submitted by the membership provided such material is in good taste, relevant to amateur radio, of interest to GEARS members, and space is available. Please send all submissions to the Editor – Dorothy Post by the last day of the month through the following medium: E-mail: dj@posthouse.us

**Club Officers: (Board of Directors)**

President .....Anna Horn –KG6ZOA

Vice President..... Scott Petersen-KE6VUS

Secretary .....Dale Anderson-KK6EVX

Treasurer.....Lester Mikeworth KG6KUO

Past President .....Gene Wright-WA6ZRT

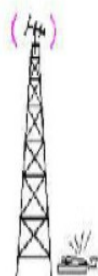
Director..... Tom Rider-W6JS

Director.....Stephen McDermott W6AKF

Director.....Stephen Wolske-KF6HSS

**Club Meetings****General Meeting Third Friday 6:30 PM****Board Meeting Third Friday 9:00 PM****GEARS Club Net****Tuesdays 8:00 PM 146.850 MHz-PL 110.9****GARS Club Net: Monday, 19:30 147.105+Mhz PL 110.0****Sacramento Valley Traffic Net****Nightly 9:00 PM 146.850 MHz-PL 110.9****ARES Nets:****Butte Mondays 20:00 146.850 MHz-PL 110.9****Yuba Sutter Thursdays 19:00 146.085+MHz PL 127.3****Glenn Thursday 19:30 147.105 MHz +PL 100.0****Other Nets:****Sac Valley Section Net—7:00 PM 2nd Wed of the month 146.085 MHz+PL 127.3****440 Wed. Night 8:00 PM Wednesday 440.650 MHz****Golden Bear 7:00 PM Daily 3975 kHz****Willie Net 8:00 PM Mondays 1930 kHz****Western Public Service System (WPSS)****Winter 5:00 – 7:30 PM 3952 kHz****Summer 6:00 – 8:30 PM 3952 kHz****ARISS (International Space Station) Uplink 144.490 MHz Downlink 145.800 MHz****Hope-1 satellite: all uplinks are in 145Mhz band:****All downlinks are in 435Mhz band****...California Traffic Net: 3906 KHz nightly @6:00 pm****For traffic listing & @6:30 p.m. for roll call.****Eight Annual****Sacramento Valley****Hamfest****Saturday, Sept 6, 2014****0700 to 1200 Hours****Presented by Western Placer Amateur Radio Club****65 McBean Park (Hwy. 193), Lincoln CA****Bandstand Parking Lot****License Exam Sessions****Exam Info - Dennis KI6HHA@aol.com****Drawing Prizes****Buy and Sell****Ham Radio Related Stuff Only****\$10 per space Approx. 10' x 10'****Bring your own tables****Hamfest Info at [WWW.WPARC.US](http://WWW.WPARC.US)**

Talk-in Frequency  
146.640 (-) 156.7





<b>Sunday, October 5, 2014 December 7, 2014</b>	<b>2:00 p.m.</b>	<b>VEC—Exams</b>	<b>Butte Co. Search &amp; Rescue Building 2591 Morrow Lane, Chico</b>	<b>Tom Rider, W6JS 530-893-9211</b>
<b>Wednesday October 1, 2014 November 12– November changes Meetings to be the Second Monday of each month</b>	<b>7:00 p.m.</b>	<b>GARS-Glenn Glenn Amateur Radio Society General Meeting, &amp; Amateur Radio Emergency Services</b>	<b>Lutheran Church Hall: 565 Main Street Artois</b>	<b>Albert Leyva- N6YCK 530 567 5979</b>
<b>Friday, Sept. 12, 2014</b>	<b>7:00 p.m.</b>	<b>OARS Oroville Amateur Radio Society General Meeting</b>	<b>St Paul's Church Parrish Hall 1430 Pine Street Oroville</b>	<b>Gary Clark KF6EWO 530-534-7435</b>
<b>Friday September 19, 2014</b>	<b>7:00 p.m.</b>	<b>GEARS Golden Empire Amateur Radio Society General Meeting/Elections</b>	<b>Butte County Search and Rescue Building 2591 Morrow Lane Chico</b>	<b>Anna Horn -kg6zoa 530-877-5939</b>
<b>SATURDAY SEPTEMBER 20, 2014</b>	<b>2:00 P.M.</b>	<b>ANNUAL TRI CLUB STEAK BAKE</b>	<b>HAMMOND PARK  OROVILLE</b>	<b>Reservations Gary Clark KF6EWO 530-534-7435</b>